

(* Obnavljanje *)

Table[{i, i^2}, {i, 1, 5}]

Out[55]= {{1}, {4}, {9}, {16}, {25}}

In[56]:= **Table[{i, j}, {i, 1, 5}, {j, 1, 5}]**

Out[56]= {{ {1, 1}, {1, 2}, {1, 3}, {1, 4}, {1, 5}},
{{2, 1}, {2, 2}, {2, 3}, {2, 4}, {2, 5}}, {{3, 1}, {3, 2}, {3, 3}, {3, 4}, {3, 5}},
{{4, 1}, {4, 2}, {4, 3}, {4, 4}, {4, 5}}, {{5, 1}, {5, 2}, {5, 3}, {5, 4}, {5, 5}}}

In[58]:= **If[2 > 0, 1, 0]**

Out[58]= 1

(* Funkcionalno programiranje *)

Nest[# (1 - #) &, x, 1]

Out[4]= (1 - x) x

(* Logisticke mape i bifurkacioni dijagram *)

x0 = 0.6;

Nest[r # (1 - #) &, x0, 100 000]

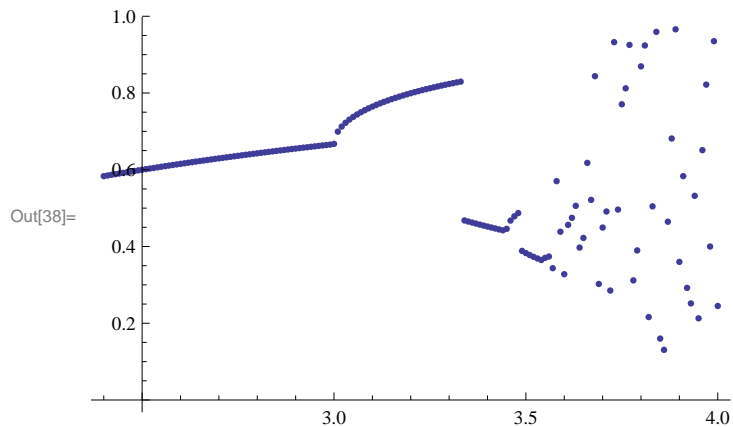
Out[25]= 0.583333

In[26]:= **Clear[r]**

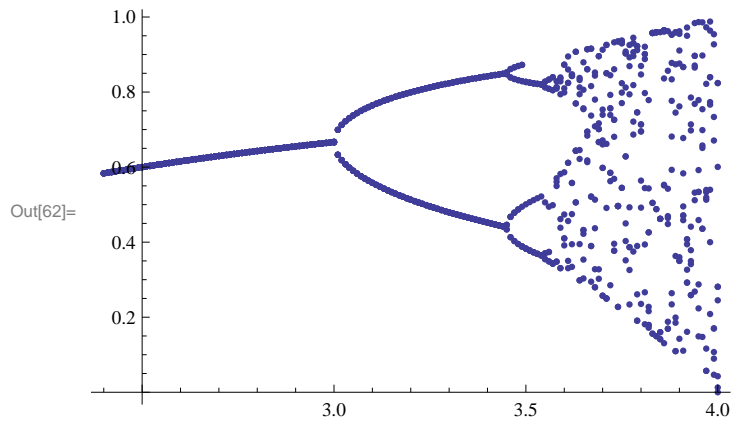
In[36]:= **x0 = 0.7;**

lista = Table[{r, Nest[r # (1 - #) &, x0, 100 000]}, {r, 2.4, 4, 0.01}];

ListPlot[lista]



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In[61]:= lista = Table[{r, Nest[r # (1 - #) &, x0, 100 000]}, {r, 2.4, 4, 0.01}, {x0, 0.1, 0.9, 0.1}];
ListPlot[Flatten[lista, 1]]
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(* Mandelbrot skup *)
c = 0.1 + 0.1 I;
Nest[#^2 + c &, 0, 20]
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Out[49]= 0.0936273 + 0.12304 i

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In[63]:= Clear[c]
lista = Table[{x, y, If[Abs[Nest[#^2 + (x + y I) &, 0, maxiter]] < 100, 1, 0]},
  {x, -2, 2, 0.01}, {y, -2, 2, 0.01}];
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In[65]:= ListContourPlot[Flatten[lista, 1]]
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